
SOMETHING ABOUT LIVING CORPSES (CADAVERS).

INTERESTING CLINICAL REPORTS.

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Something About Living Corpses (Cadavers).

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~~St. Petersburg, Russia,~~ Leprosy existed in ancient times, and belongs to a group of maladies against which remedies are apparently useless.

At the present time, as well as a thousand years ago, leprosy can neither be successfully treated, nor can the physical and moral sufferings incident to the disease be materially lessened.

Notwithstanding the great mortality of cholera and other epidemic diseases they cannot be compared with leprosy, on account of the long continued sufferings and privations incident to the latter disease. The disease usually begins with general debility, and a red colored eruption, which in time becomes almost black, on the body. After a lapse of time the eruption or spots, are converted into tubercles and nebules, and if it continues to spread produces a copper coloring of the face and general thickening of the skin and cheeks, falling out of the eyebrows, eyelashes and beard, and often distension of the nose, eyes and ears. These distinctive changes may so alter the expression as to cause the face to resemble that of a lion. In some cases such changes reach their full development in from two to six months. Parts or organs, such as fingers, palate, nasal septum are lost by the destructive process, the cornea is also frequently lost, and the eyes destroyed.

Some forms of the disease may remain chronic for many years, and the leper, with such distorted and ugly face, may live to an advanced age.

I have been informed by a friend who resided in the district of Jac^uts, Siberia, that the natives of that country are very cruel to the lepers, forcing them to live in buildings specially set apart for their use. The fear of the contagion is so great that the natives will not speak with the lepers except at a distance of a few fathoms. Such inhuman and cruel treatment was formerly exercised in Europe, and was regarded as the only means of preservation.

The disease was imported into Europe from Egypt and Palestine, and during a long period was a plague to the western Christian world. The European authorities enforced strict isolation, as practiced in the time of Moses. In this direction, the first laws were enacted and took effect in the Seventh century. In the Eighth and Ninth centuries special isolated leprosories were built. Such establishments were opened in England, Italy, Spain, Netherlands, Switzerland and Norway. During this period severe measures were adopted to prevent the development and spread of the malady. One who was recognized as a leper was immediately confined in a leprosory, and from that time excluded from society. This action was accompanied with certain ceremonial solemnity of a religious character. On an appointed day, the priest in mourning, led by clergymen, with a cross, repaired to the residence of the patient, who also in mourning clothes, waited for the priest at his entrance. Here the priest preached words of admonition and consolation, saying that the leper completely dies to the world, that God and the church henceforth prohibits him from all association with healthy people, and that he ought to consider himself a dead body, which is lead to the grave, but to whom God donates the last days of his life for the possibility of his redemption. At the end of these admonitions a solemn march was performed to the church, and the leper dressed in black followed the priest, who delivered a sermon. In the Thirteenth and Fourteenth centuries there existed a custom to read a requiem (*la messe des morts*) in the church, and during the prayer the leper remained lying on a special sepulchrum. On leaving the church the priest, with sand on a shovel, then bestrewed the head of the leper as a token of his death to the world. After the above described ceremonies the wretched patient, with funeral songs, was brought back to his home, where a whole chapter of necessary rules was read to him. He was commanded not to enter any church, house, mill or other place where healthy people gather or congregate; he was prohibited from washing his hands or clothing in any river or brook, the waters of which were used by healthy people. He was commanded to wear special clothing to show that he was a leper. He could only answer questions or converse in a meeting when standing against the wind. He was allowed to eat and drink only in the company of lepers. In the leprosory a rattle was given to the patient, by which he warned those approaching him, a special bag for col-

leeting alms was provided, a barrel for water, and a stick and gloves were also given, so as to prevent the patient touching anything with the bare hands. The rules governing the leper were strict, and they were enforced without sentiment or sympathy. The patient's condition could scarcely be worse. He aroused a repugnance and terror among the people wherever found. Even those who stood at a distance were afraid of him. However, the avoidance of people lessened his moral sufferings, and the enforcement of these severe measures preserved the healthy from the contagion, and thus prevented the spread of the disease. As a result of the adoption of these measures, the propagation and spread of leprosy was checked, so that by the end of the Eighteenth century the disease was scarcely remembered as it had formerly existed.

In recent times, however, leprosy attracts serious attention. It has been contended by some eminent men in the profession, that leprosy is not contagious, but that the causes of the disease are heredity, unfavorable localities, deficient and improper food and climate. By these, strict measures to prevent the spread of the disease is regarded as superfluous and unnecessary. On account of this erroneous teaching the disease has become more widely disseminated. This disastrous result has forced the conclusion, which is well nigh universal, that leprosy is a contagious disease. In proof of the correctness of this conclusion, the disease has steadily decreased in those countries where proper measures for isolation have been adopted. Prof. Peterson says that in the leprosories of Norway, the number of lepers gradually diminished from 2700 to 950, and that the annual rate of those becoming ill with the disease fell from twenty to ten persons. Such results give hope that within ten or twenty years Norway will be free from the disease.

As in other countries, leprosy was known in Russia long ago. In the Thirteenth century the German colonies spread it over the Baltic districts, and in the Eighteenth century the southern districts being in intimate contact, transmitted the disease to the people of the east. Little or no effort was made to check the disease in this country until within the past few years. I have been told by a physician that he knew of a family wherein the same utensils, towels, etc., were used by the lepers and the well indiscriminately.

In the districts of Don the lepers are in miserable condition, there being no special asylums for their confinement. In some parts of

Turkistan the lepers are allowed to walk freely about the streets, although in that district they have leprosories, but hygienic conditions are bad, and the patients often suffer with hunger. Being compelled by such necessities to seek for food, the lepers beg alms of healthy people, who in time may become propagators of the contagion. On account of these unfortunate conditions the number who contract the disease increases every year, and the important question arises as to the best and most practical methods of improving these circumstances and conditions and checking the spread of the malady.

Interest in these questions was aroused in the profession about twelve years ago, and measures were taken to mitigate the evil. Five years ago a society was formed through whose influence and efforts three leprosories were built, capable of accommodating 200 patients. About the same time a similar institution was established and opened in the suburbs of St. Petersburg, to which was donated 20,000 roubles. The establishment of these institutions, is a recognition of the necessity for isolation of lepers, and their separation from the healthy.

It was believed until quite recently that there was no efficient remedy for leprosy, and that scientific research in that direction was useless. A new remedy has, however, been offered by Dr. Shiperoëtz, and until further trial, this opinion must be held in abeyance. Dr. Shiperoëtz presented a patient, aged 25 years, whose features resembled that of a lion. The sufferer was not able to close his eyelids, neither could he flex the wrists, which were covered with leprous spots. Some parts of the body were completely deprived of sensibility. The patient was treated for two months with oil of chaulmoogea (an Indian plant), beginning with small doses and gradually increasing to ten grains daily. The result was great improvement; the leprous eruption quite disappeared, the face assumed a more natural expression, the eyelids were softer and more movable, the fingers could be more readily flexed. In short, the entire surface of the body assumed a more normal appearance.

This improvement can undoubtedly be attributed to the use of the oil of chaulmoogea, assisted by baths and proper hygienic surroundings. The oil can be procured from grains of *gynecardia odorata*, which is obtained from a green tropical tree found in the forests of East India, north of Nisama, and in many other districts of south-

eastern Asia. The nut or kernel from which the oil is obtained is rich in albumen and butter. The oil is extracted by pressure aided by gentle heat. It is, at ordinary temperature, a solid, melting at about 95° F. The seeds are well known in India, and is used as a remedy for different diseases, such as eruptions, scrofula, fevers, etc. It may also be used in powder for similar purposes, and in all cases the dose may be gradually increased. The oil may also be used as an external application, not only in leprosy, but in chronic eczema, scabies, lupus, etc. The usual strength of such application should be from twenty to thirty drops of the oil to an ounce of excipient. It may be that oil of chaulmoogea is not equal to effecting a complete cure in the more serious forms of leprosy, but it has in many cases delayed its progress and mitigated its symptoms.

To this communication I will add the following: Leprosy is characterized by the permanent presence of the bacilli of Hansen, a Norwegian physician, who proved its presence by bacteriological investigation, and described the bacilli in 1873.

The leprous bacilli resemble those of tuberculosis, the difference being that the former are shorter and have an independent movement. Leprous bacilli may be colored by dissolving them in an^{anglier} paint; they give their color away easier than the tuberculosis and other bacilli, and can be very soon colored in fuchia at ordinary temperature, while this method is impossible for tuberculosis bacilli.

I have not discussed herein the treatment of leprosy by hypodermic injection of immunized cultures obtained by a special method, although it has been claimed by Vlaja Laverde, that the symptoms in sixty cases were ameliorated and their condition improved by the employment of this method.

There are two forms of leprosy noted with spots and tubercles on the body and asthenic derangement of the nervous system; first, hyperesthesia appears and then anesthesia, and therefore in consultation in Berlin in 1897, Zambaco-Pascha affirmed that leprosy and Morvain's disease were identical.

Muna says that leprosy bacilli develop in tissues in lymphatic and vessels between cells, but never in protoplasm, and considers Virchoff's giant cells as a conglomerate of mortise^d cells. The disease very often destroys the nasal mucosa, and the cartilaginous portion of the septum in about five per cent. of those attacked. It

very seldom attacks the larynx—the pharynx—eyes, lips, tongue and lungs.

At a meeting held in the building of the Red Cross Society at St. Petersburg in November of last year, the question as to the contagiousness of leprosy was discussed. Dr. Helat, who studied for two years in Lifland district, made a report in the form of a dissertation. He examined more than 100 cases of the disease, and his experience and observation lead him to the conclusion that the disease is contagious.

At present, in the district of Lifland, there are over 700 registered lepers, with seven hearths, and on each of them disseminated cases of leprosy were found. The propagation of the malady depends upon the communication of the people, who well understand the contagiousness of the disease.

In the profession the disease is generally considered both contagious and hereditary, and always aggravated by bad sanitary conditions. It is especially prone to spread amongst people living on the shores of rivers, lakes and seas, whose chief article of food consists in fish. The policy of segregation by placing the lepers in asylums or leprosories is the only hope of finally suppressing the disease; by this means it is hoped that by the beginning of the Twentieth century leprosy will have disappeared.

Interesting Clinical Reports.

BY DR. A. SCHIRMAN, ST. PETERSBURG, RUSSIA.

REMOVAL OF GALL-BLADDER.

At the Surgical Society of Pirogoff, of St. Petersburg, a paper was read by Dr. A. Trojanoff with reference to the performance, in Obuhoff's Hospital, an interesting operation of the complete removal of the gall bladder. Such a surgical operation is one of the newest and rarest in Europe. The gall bladder represents by itself an organ, the designation of which is yet not fully studied, though its anatomical location at the liver shows that the same bladder is defined by nature to serve as a reservoir for a bile-keeper. In view of this, its necessity in the human body was considered as indisputable, and for a long time the surgeons had not decided on its complete excision (removal). Meanwhile, this organ is not rarely injected or filled with gall stones deposited therein, and thus an overflow of bile into the peritoneum occurs, giving often bad results to the patients. Attempts at removal of the gall bladder was first performed in Europe, I think.

A similar operation was made in the above named hospital on a patient who now, after operation and treatment, is in a healthy, good condition, and left the city, being perfectly satisfied with the aid mentioned. He was exhibited in the medical society to the members and guests present.

On the section of the patient's abdominal cavity on the operating table Dr. F. found that it was filled with bile. This case made him pay careful attention to the gall ducts and to the gall bladder. By attentive exploration it was shown that the bladder was impacted with stones, and its contents poured from it. Whereas, the perforation occurred in such a way that to put stitches in the bladder was impossible, the surgeon having applied ligatures above the injured place, and cut the bladder entirely off.

The result of this audacious operation was splendid. Recovery without any fever, and abnormal changes in the patient and gastro-

intestinal disturbances were not noticed. This case gave reason to the conclusion of the following thesis: That the gall bladder does not represent such an essential necessity in the human body, which is commonly believed. Prof. Sklifasowsky added to this report some remarks. He traced a parallel between operations on urinary and on gall bladders, recommending to operate on the second, while using the already instructed surgical methods which should be applied on the first (gall bladder).

CONCERNING ACOUSTICS.

S. Lury, M. D., took up the question of the function of the acoustic organ in scholars of two schools, where 150 boys and 150 girls, from 8 to 15 years, were subjected to his examination. The result of his work was as follows: One-fifth part of the pupils hear whisper with both ears 30 meters away, and three-fifths a distance of 20 meters away. Stiffhearers were 18 per cent., taking 15 meters as minimum of normal latitude of hearing whisper. Acoustical meter of Politzer gave results resembling the examination of whisper by the author. The lower boundary of hearing is limited in C,—E, and the upper in Q,1—0,2 of division in whistles Edelman-Galton's. The osseous sound passing in children with normal acoustic organ is not shortened, as well as the aerial sound passing in a distance of seven octaves. The experiment of Rinne in schoolage ought to be exact. In reference to Weber's experiment, children give mostly puzzled testimonies; because a camerton being placed on the middle of the head gives them a projection in both ears at the same time. In the last sulphur eorks are found more in girls than in boys. Seythliæ dimness of the membrane tympany is often met in children, who had measles, from which the function of the acoustic organ was not normal; generally, a presence of membrane tympany dimness indicates a disease of the middle ear.

Pyorrhæa was found in 5 per cent., adenoid vegetation in 27 per cent., one-third of which have defect of the middle ear. The latter gives mainly a condition of a feeble hearing. Very often the middle ear of children begins to suffer during acute contagious disease, disease of the nose and pharynx.

Inattentive and incapable children very often turn out to be stiffhearers. Absence of nasal breathing and adenoid vegetation are often a cause of bad intellectual development, inattention and un-

consideration. Stiffhearers ought to sit nearer to the teacher. Acoustics in school rooms must be good.

INFLUENCE OF ATMOSPHERIC PRESSURE ON THE BLOOD.

A railway physician, Swanecky, while building a railway bridge on the river Nieman (near the village of Olat), examined the blood of men and animals, who were in Kessons, where the pressure of the air reached 2-3 atmospheres. Experiments were made on nine workmen and twelve male rabbits; the latter being placed in deep wooden boxes, with grates only on the upper side, which was covered with a sack so as to avoid the presence of electric light. The number of red blood corpuscles was counted by apparatus of Thoma-Zeiss, and the definition of quantity of hæmoglobin by Gower's apparatus. Under influence of compressed air, in warm-blooded animals and men, the number of red blood corpuscles diminish at 1 cub. millimeter, which chiefly depends on their ruin (leucocythoz). The quantity of hæmoglobin also lessens. The number of white blood corpuscles increases. After leaving the Kennon and being in ordinary atmosphere, the number of red blood corpuscles comes to normality on condition that the pressure of the barometer is not higher than two atmospheres (including the normal) and lasts a short time (a few hours), then the return to the normality takes place in two to three days; in opposite case, one to four weeks are required for reproducing the blood. Hæmaglobin also comes to its normal, but more slowly. Leukocytes, after leaving the Kesson, disappears. Thus, it must be acknowledged, that under influence of compressed air, anæmia develops.

